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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

SOOHOO, TONY GLEN

ART UNIT PAPER NUMBER

1723

DATE MAILED: 03/12/2003

77

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------|---------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/973,811 | BINDER ET AL. |
| | Examiner | Art Unit |
| | Tony G Soohoo | 1723 |

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 11 October 2001.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 11-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 11-26 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

| | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 12-18, and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 12-18 are narrative and does not particularly point out a manipulative step. The recitation of "can be adjusted" is narrative and does not point out a manipulative step in the claimed process method claims. The recitation of "serves as a" does not point out a manipulative step in claims 13-14. Claims 15-18 point out details to the structure however does not point out a positive manipulative step such as a step of provision of the structure.

3. Claim 19-25 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: a positive structural elements to permit a "continuous product flow established form the inlet as far as the outlet such that the flow of the primary product can be regulated in a dosed fashion at the outlet".

At present the claim only points out "at least one outlet" and "at least one inlet", and a slide valve in depending claims 20, 21. However, It is unclear how the mere provision of these elements may provide such an operation of a continuous feed of

product flow of such a regulation of the rate of feed as pointed out in the narrative clause, and a operation of batch discharge closure in coordination with the feed passing through the inlet since there are no feed mechanisms or outlet closures being claimed as part of the device in operative cooperation to produce such an effect.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 19 and 22, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Hess 1653281.

Hess teaches a stirring device having a rotating tool 21, 27, an inlet having a funnel 16, and an outlet 23, 24 for a batch discharge, note that the inlet funnel provides an inlet structure and may fully operate when funnel is operated so that it is constantly full so as to provide a continuous feed of material into the container 19 for processing and one may open and close the slide valve intermediate floor 24 for a batch discharge. Also not additional points 13 for introduction of liquid. Whereas the inlet and outlet may structurally be operated to satisfy the functional narrative operation of the claims, it is deemed that the structure of the inlet and outlet fully satisfies the claimed inlet and outlet.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 11-18 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hess 1563281 in view of Jelks 4125063.

Hess teaches a stirring device with the method of providing solids via 16 and liquid via point structure 13 having a housing 10, filling the mixer via the funnel 16, establishing a shear field produced by the mixer tool 31, establishing a product flow from inlet funnel 16 and a dosed discharge at the slide valve 15.

Hess discloses all of the recited subject matter as defined within the scope of the claims with the exception of the step of providing a continuous feed of material into the funnel 16 so that a continuous flow is provided into the housing 10 for mixing.

The reference to Jelks teaches a hopper 12 including a funnel 13 which provides a source of material for the inlet of the continuous metering device 14. The hopper is large enough so that it provides sufficient continuous source for the continuous screw fed device for mixing in the housing 32.

In view of the teaching of Jelks that one may provide a funnel and screw feed device for continuous fed of material into a container without the need for a batch filling of the inlet opening to the mixer housing, it is deemed that it would have been obvious to one of ordinary skill in the art to provide a continuous source of material feed at into

the mixer housing such that one may not have to constantly put more material in to the funnel 16 of Hess. With regards to the rate of constant feed such that it does not over fill housing with material, it is deemed that it would have been obvious to one of ordinary skill in the art to not to provide fed of material at such a high rate such that there is a back up of material whereas a person having ordinary skill in the art or a mere mechanic in the art would understand that an excess of feed rate into an inlet may cause a backup of material out of the mixer chamber and thus is not desirable and inefficient in the provision of material into the mixer chamber.

With regards to claim 12, the claim does not positively claim a step of moving the mixing tool backwards, thus the only requirement of claim 12 is to provide a structure capable of adjustment of backwards operation. Note that the tool as shown by Hess fully satisfies the requirement that may be "adjusted" to provide to move backwards via the rotational direction of 39.

With regards to claims 13-14, note that the opening of the valve 15 provides dosing of material from the housing 10. Note that claims 15-17 that there is a batch mixer 11 located after the vertical mixer 10. Note that the radial movement of the mixing tool blades inherently provides a radial centripetal component of the product which presses against the inner wall of the housing as it is thrown outward by the mixing blades. With regards to claim 26, note that liquid is used in the device.

Allowable Subject Matter

8. Claims 20, 21, 23 and 25 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following disclose vertical mixers: Bullock 1496807, Davies 1968994, Black et al 6126307, Stevens 784598, Erich et al 4854715, Krekeler et al 3709664, Soe 4376515.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony G Soohoo whose telephone number is (703) 308-2882. The examiner can normally be reached on 7:00 AM - 5:00 PM, Tues. - Fri.. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Tony G. Soohoo
Primary Examiner
Art Unit 1723

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